

Figure 1

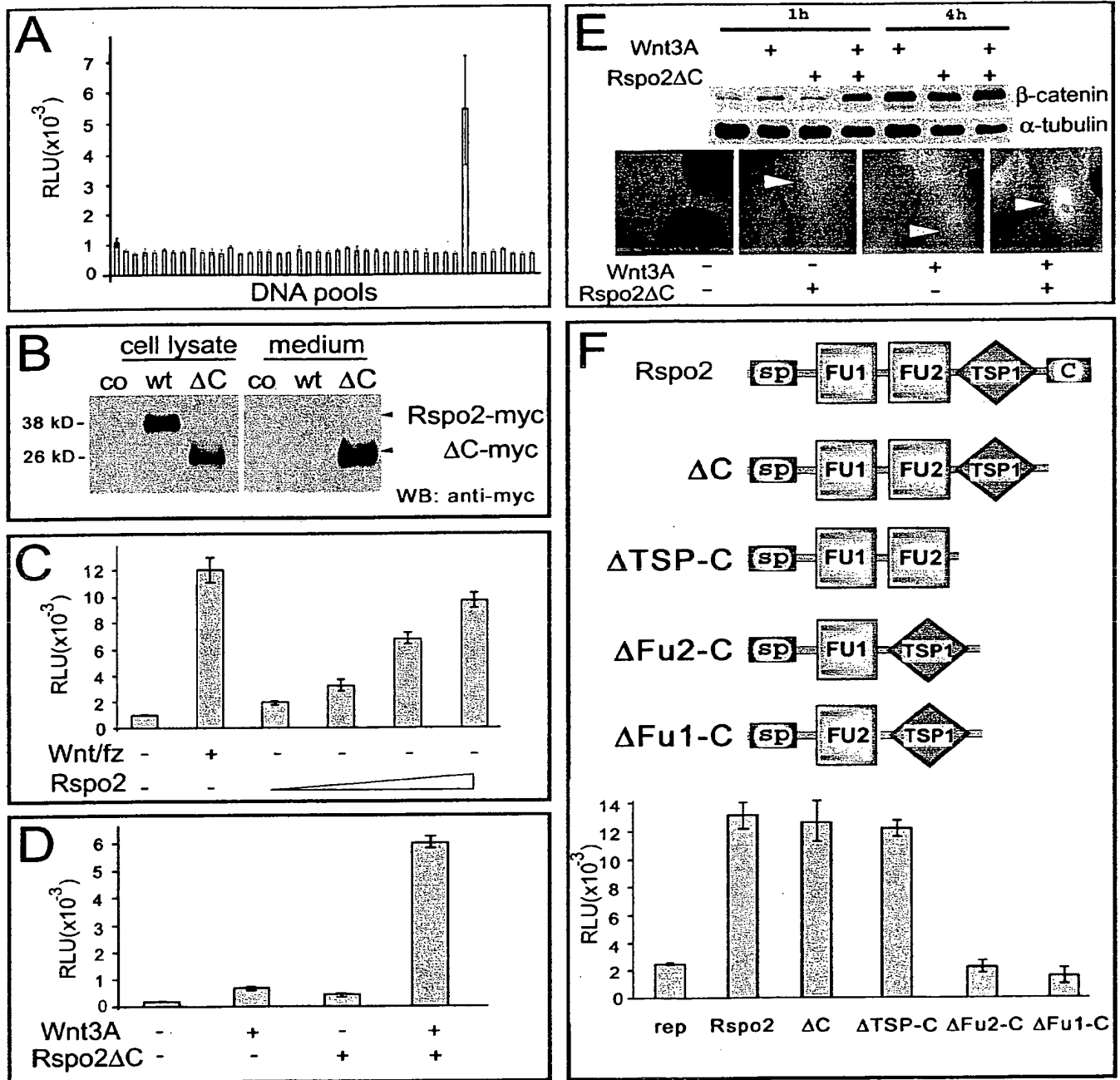


Figure 2

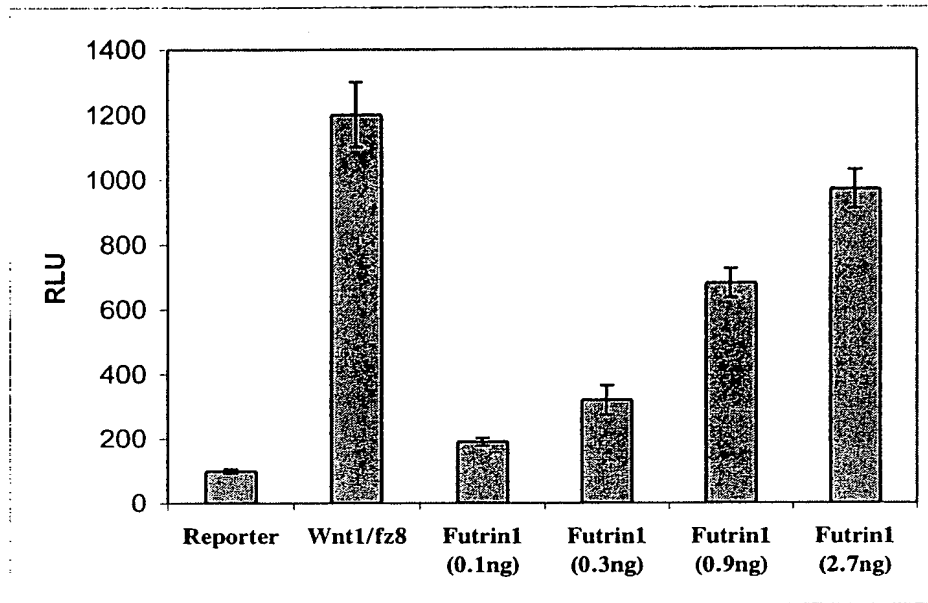
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Figure 3

hFut1	261	MQRLFSFAL	ILN	CM	DY	SH	CQ	GNR	WRR	RRA	SY	SN	PICK	G	CL	SC	SK	NG	CS	RC	CO	Q	
hFut2	271	MLRLISWLF	ILN	FM	EY	IG	SN	SR	GR	RR	HP	NP	SO	CQ	GG	CA	TC	SY	NG	CL	SK	CP	
hFut3	251	MRIGLCVVAL	V	SW	TH	LT	ISS	GI	GR	RR	SA	EG	SO	CA	KG	CE	LC	SE	VG	NG	CL	CS	
hFut4	281	MRAPLCCLLL	V	HA	VD	ML	AL	NR	...	RK	QV	GT	GG	NC	TG	CL	IC	SE	NG	CS	TC	Q	
hFut1	59	LFFFLRREGM	ROY	GE	CL	HS	CP	SG	GY	GHR	AP	DM	N	CA	R	...	...	...	...	...	...	...
hFut2	61	LFALERIGM	QIG	VC	LS	CP	SG	GY	G	TR	PD	N	K	CT	K	...	...	...	...	...	...	...
hFut3	60	LFILLERND	RQ	VG	CL	PS	CP	PG	Y	D	AR	PD	M	N	K	...	...	...	...	...	...	...
hFut4	54	LFLLRREGM	ROY	GE	CL	HS	CP	SG	GY	G	TR	PD	N	K	CT	K	...	...	...	...	...	...
hFut1	102	DSCFSKDFCT	KCK	VG	FY	LH	GR	SF	DE	CP	DG	FA	PL	EE	TM	EC	VE	G	...	...	...	...
hFut2	103	DTCFNKNFCT	KCK	SG	FY	LH	GR	SF	DE	CP	DG	FA	PL	EE	TM	EC	VE	G	...	...	...	...
hFut3	120	BA	CF	SN	EF	CT	KCK	EG	LY	LH	GR	SF	DE	CP	DG	FA	PL	EE	TM	EC	VE	G	
hFut4	96	ES	CF	SQ	DF	CI	E	CK	RQ	FY	LH	GR	SF	DE	CP	DG	FA	PL	EE	TM	EC	VE	
hFut1	160	NKTCGFKWGL	ETR	TR	QI	V	K	K	P	V	K	D	T	I	P	C	P	T	I	A	E	S	R
hFut2	163	GKTCGFKRG	CT	ET	R	V	R	E	I	O	H	P	S	K	N	L	C	P	T	I	A	E	S
hFut3	180	QQLCGFRRC	SE	ER	T	R	R	V	A	H	A	P	V	D	H	A	C	S	D	T	K	E	R
hFut4	154	GKTCGSAWGL	ES	R	V	R	E	A	G	R	A	G	H	E	E	A	T	C	Q	V	L	S	E
hFut1	217	NKK..K...	K	R	K	L	I	E	R	A	Q	E	G	H	S	V	F	A	T	D	R	A	N
hFut2	220	RKKPNKGES	K	E	A	P	D	S	K	S	L	E	S	S	K	E	P	E	O	R	E	N	K
hFut3	237	REN....	A	N	R	N	L	A	R	K	E	S	K	E	A	G	S	.R	R	K	G	Q	Q
hFut4	212	RP	R	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Figure 4

A



B

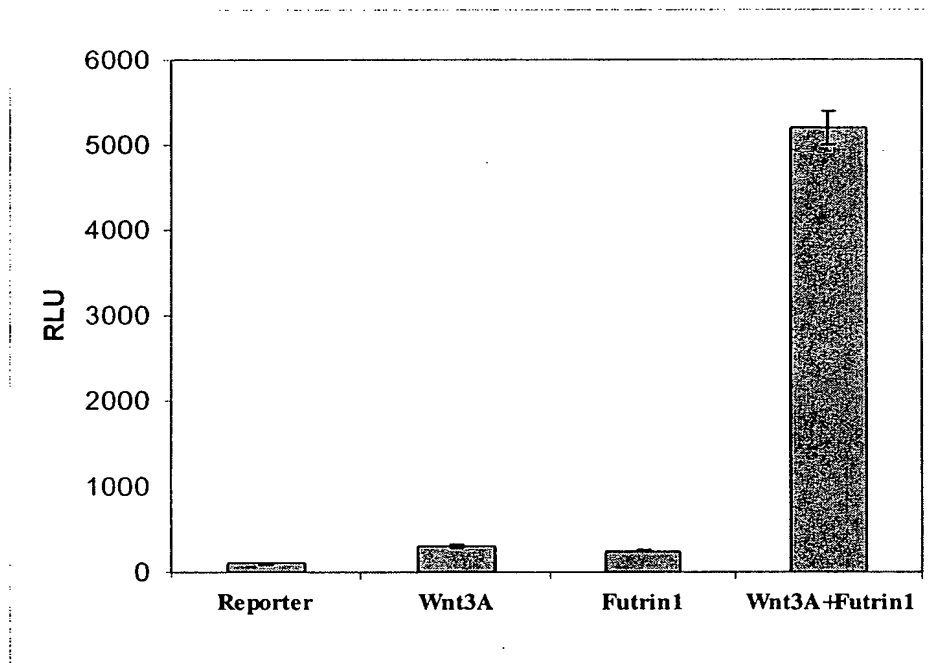


Figure 5

A

hR-spondin1 251 **MRLGLCVVALVLSWTHLTISR**. **GIKGRQRRTSAEGSOA** **CAKGCELCEVNGCLKCSPK**
hR-spondin2 261 **MQFRLFSFALLILNCMDVSHCQ**. **GNRWRRSKRASVSNPICKG**. **CLSCSKDNGCSR** **COQK**
hR-spondin3 271 **MHLRLISWLFILNFMETIGSONAS** **RGRQRMMHPNVSQ** **COGGCAT** **CS** **DYNGCLSCKPR**
hR-spondin4 281 **MRAPLCLLLLVAAHAVDMLALNR**. **RKQVGTGLGGNCTG**. **CHICSEENG** **CGST** **CQQR**

signal peptide **furin-like domain 1**

hR-spondin1 60 **LFILLERNDIRQVGVCLPSCPPGYEDARNPDMNKCI**. **CKIEHC** **CEA** **CFS** **HN** **FCTKCKEGLY**
hR-spondin2 59 **LFFFLRREGMROYGECLHSCPSGYVGHRA** **PDMNR** **CAR** **CRIEN** **CD** **SCFSK** **D** **FCTKCKVGFY**
hR-spondin3 61 **LEFALERIGMKQIGVCLSSCPSGYVGT** **TRYPDIN** **KCTKCKAD**. **CD** **TCFNK** **N** **FCTKCKSGFY**
hR-spondin4 54 **LELLEIRREGIRQYGKCLHDCPPGYEGIR** **GOEVNR** **CKKCGAT**. **CE** **SCFSQ** **D** **FCIRCKRQFY**

furin-like domain 2

hR-spondin1 119 **LHKGR** **CYPAC** **PEGSS** **AA** **NGTMEC** **SSPAQ** **CE** **M** **SEWSPW** **GPC** **SK** **KQOL** **CGFR** **RG** **SE** **ERTRR**
hR-spondin2 119 **LHGR** **SFDE** **CPD** **G** **FAPLEETME** **CV** **EG**. . **CEVGH** **WSEW** **GT** **C** **SRNNR** **TCG** **FKW** **G** **LETR** **TRQI**
hR-spondin3 120 **LHLGK** **CIDN** **C** **PEGLE** **ANNHTME** **CVS** **IVH** **CEV** **SEWN** **PW** **SP** **CK** **K** **G** **K** **T** **CG** **FK** **R** **G** **T** **ET** **RV** **REI**
hR-spondin4 113 **LYKGK** **CCLPT** **CP** **PG** **LA** **HONT** **REC** **Q** **GE**. . **CE** **L** **G** **P** **W** **G** **G** **W** **S** **P** **C** **THN** **G** **K** **T** **C** **G** **S** **A** **W** **G** **L** **S** **R** **V** **R** **E** **A**

thrombospondin type 1 domain

hR-spondin1 180 **LHAPVGDHAA** **CSD** **TK** **ET** **RR** **CT** **VRR** **VP** **CP** **EG** **Q** **K** **R**. . . **RKGG** **Q** **G** **R** **R** **E** **N**. **ANRN** **L** **A** **R** **K** **E**
hR-spondin2 160 **VKKPVKDTIP** **CPT** **IA** **ES** **RR** **CK** **M** **T** **M** **R** **H** **C** **P** **G** **G** **K** **R** **T**. . . **PKAK** **E** **K** **R** **N** **K** **K**. . . **K**. . . **K** **R** **K** **L** **I** **E** **R** **A**
hR-spondin3 163 **LOHPSAKGNL** **CPPT** **N** **ET** **RR** **CT** **V** **R** **E** **K** **K** **C** **Q** **K** **G** **E** **R** **G**. . . **KKGR** **E** **R** **K** **R** **K** **K** **P** **N** **K** **G** **E** **S** **K** **E** **A** **P** **D** **S** **K**
hR-spondin4 154 **GRAGHEE** **AA** **T** **C** **Q** **V** **L** **S** **E** **S** **R** **K** **C** **P** **T** **Q** **R**. **PCP**. **G** **E** **R** **S** **P** **G** **Q** **K** **K** **R** **K** **D** **R** **R** **P** **R**. **K** **D** **R** **K** **L** **D** **R** **R** **L**

hR-spondin1 231 **SKE** **A** **G** **A** **G** **S** **R** **R** **R** **K** **G** **Q** **Q** **Q** **Q** **Q** **G** **T** **V** **G** **P** **L** **T** **S** **A** **G** **P** **A** **---**
hR-spondin2 229 **Q** **E** **G** **H** **S** **V** **F** **A** **T** **D** **R** **A** **N** **Q** **---**
hR-spondin3 237 **S** **L** **E** **S** **S** **K** **E** **T** **P** **E** **Q** **R** **E** **N** **K** **Q** **Q** **Q** **K** **R** **K** **V** **Q** **D** **K** **Q** **S** **V** **S** **V** **S** **T** **V** **H**
hR-spondin4 224 **D** **---**

B

hRspo2	39.9		
hRspo3	43.7	45.9	
hRspo4	40.3	43.9	41.2
	hRspo1	hRspo2	hRspo3

C

mRspo2	40.5	95.5	44.2	44.8
XRspo2	40.8	83.5	43.8	42.2
	hRspo1	hRspo2	hRspo3	hRspo4

Figure 6

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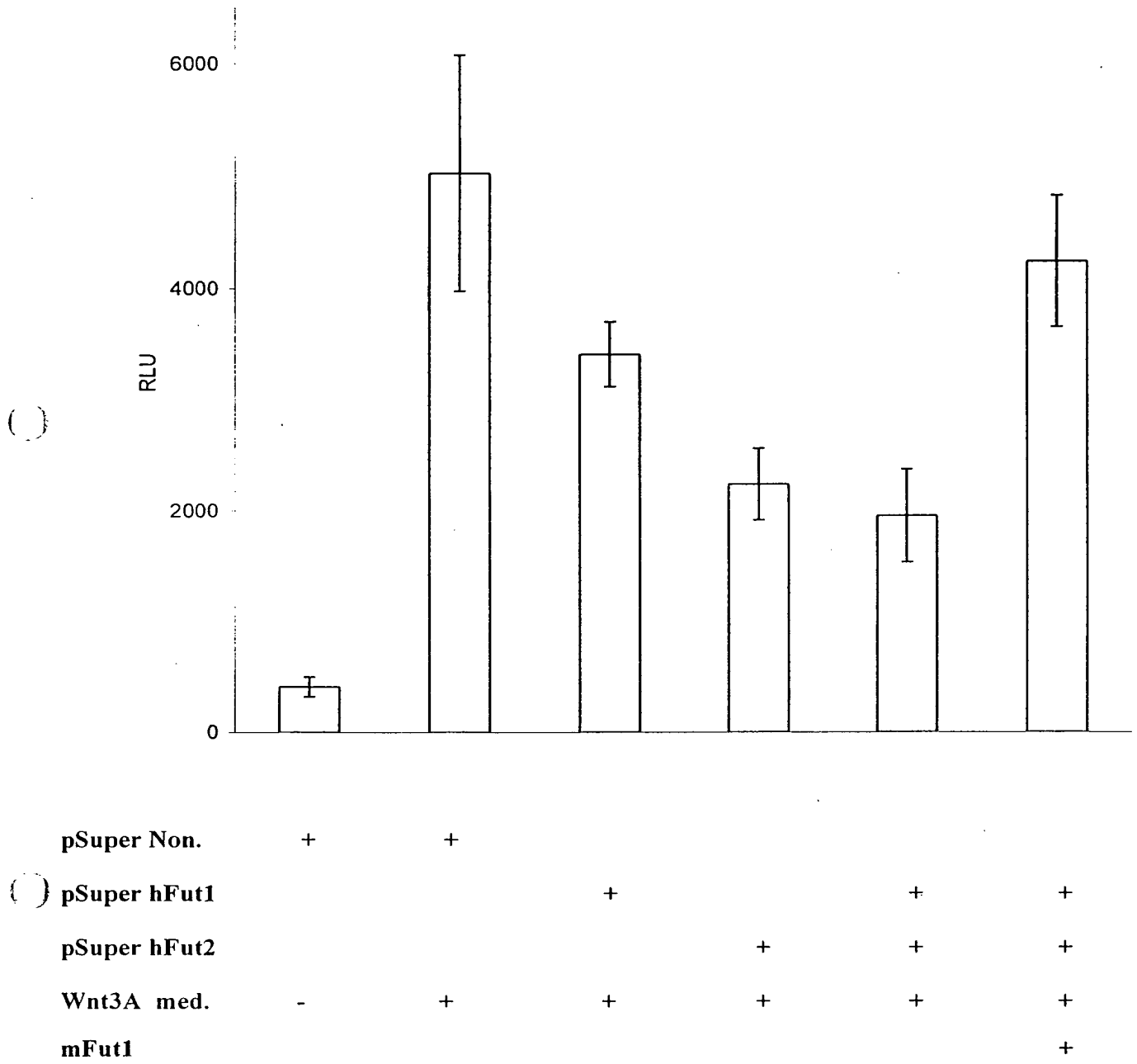


Figure 7

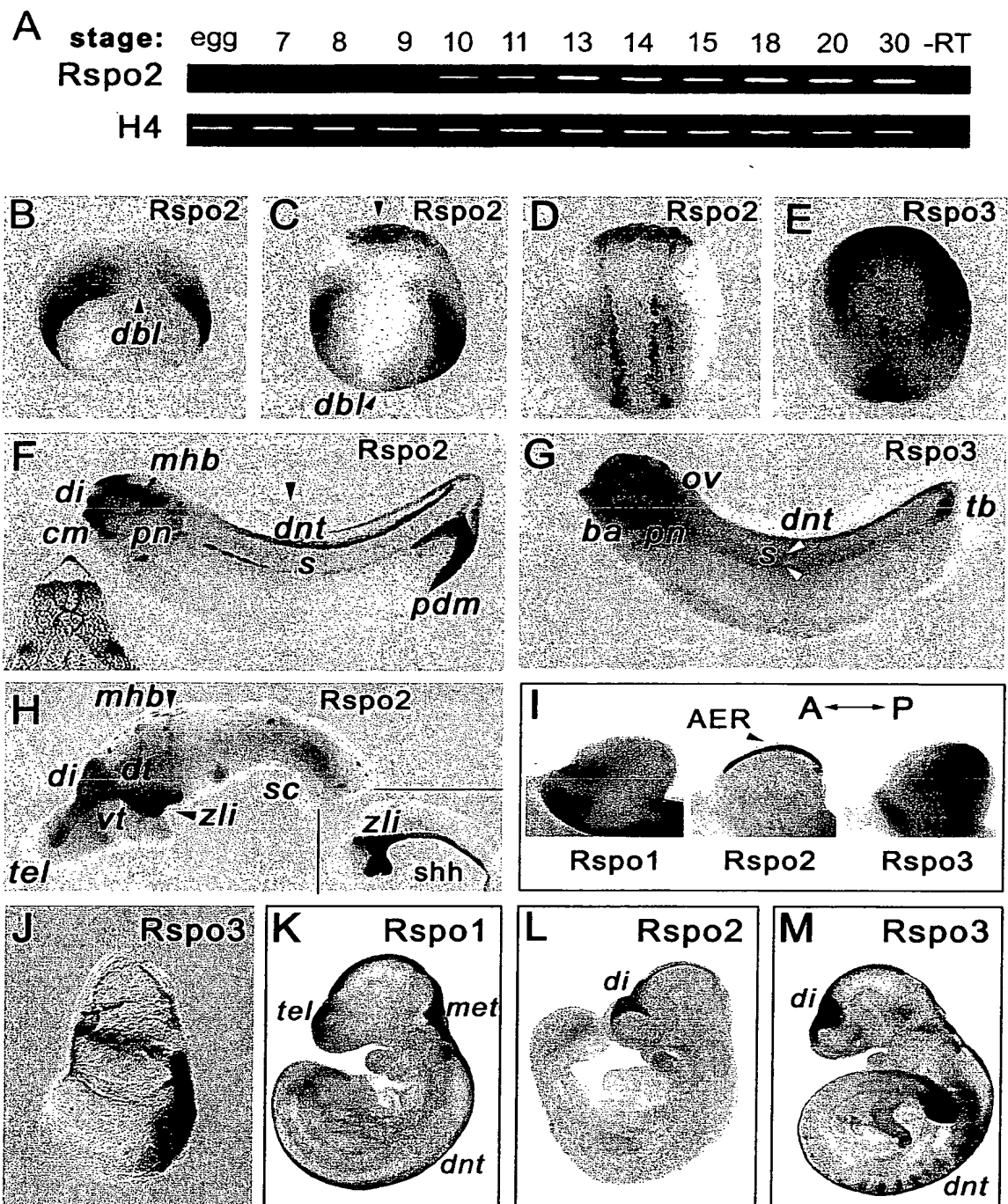


Figure 8

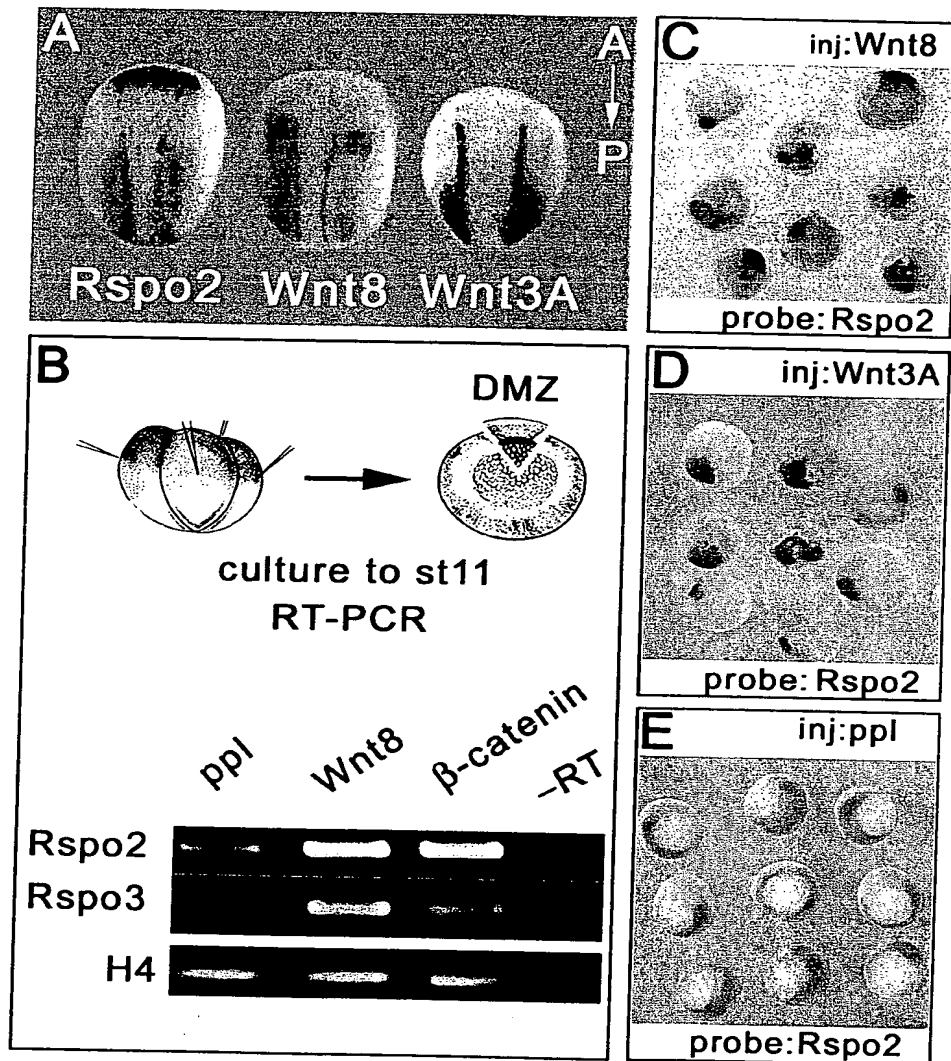
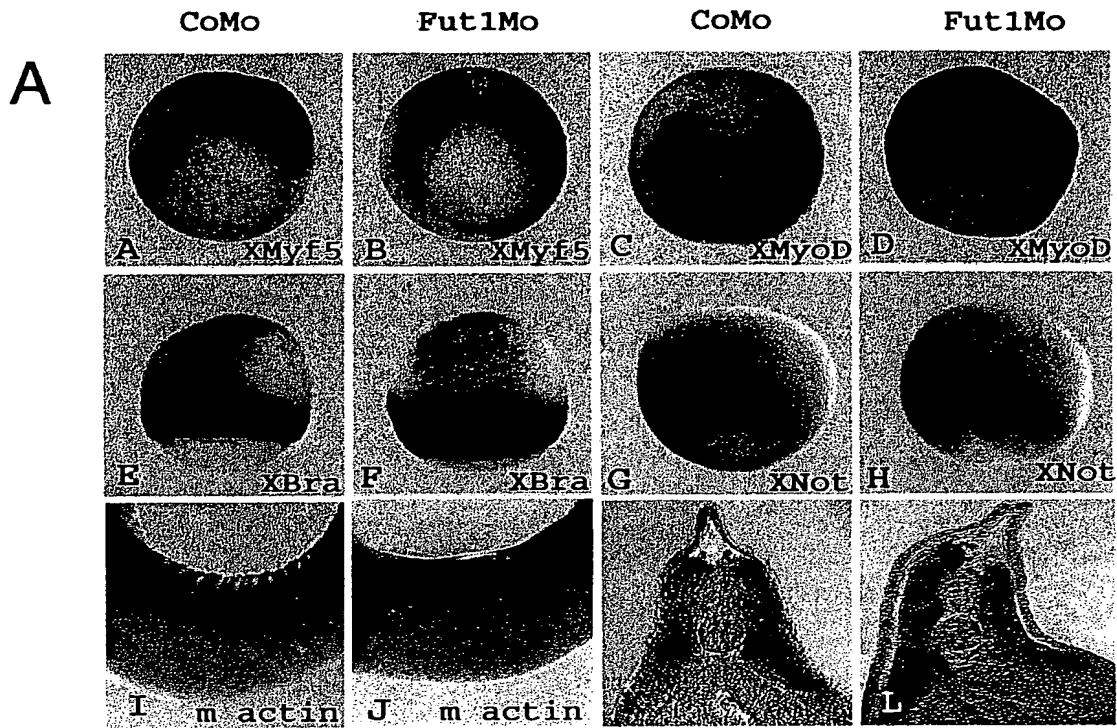


Figure 9



B

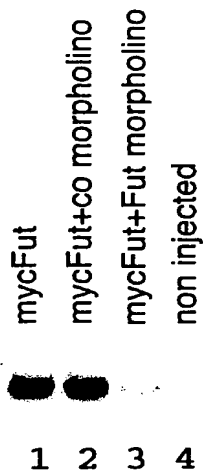
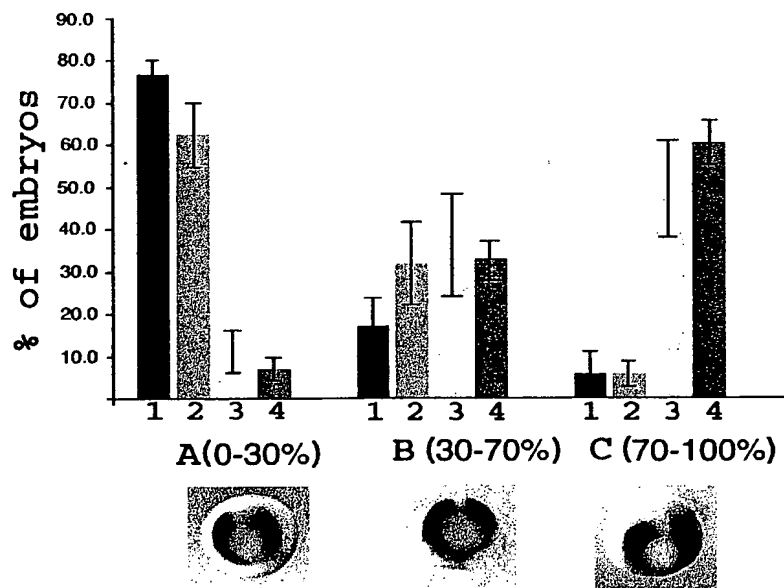


Figure 10

C



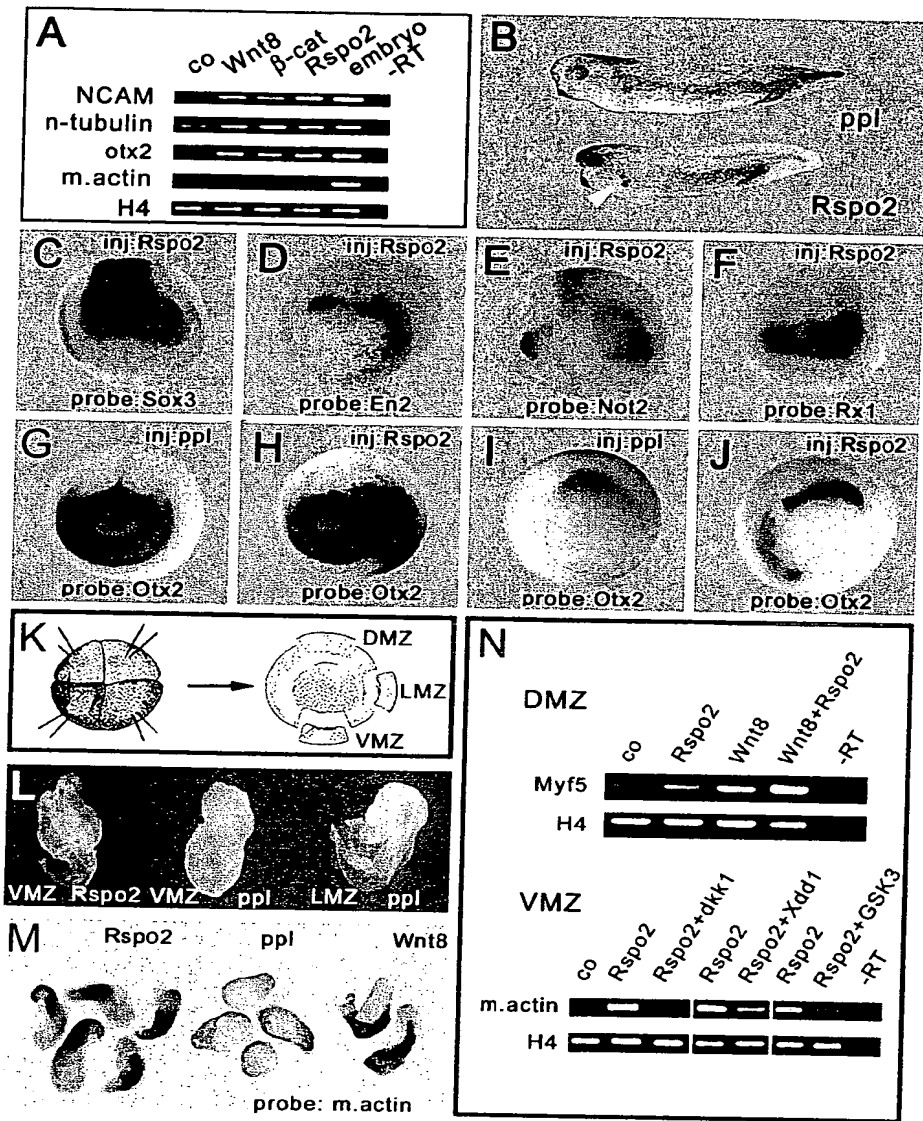


Figure 11

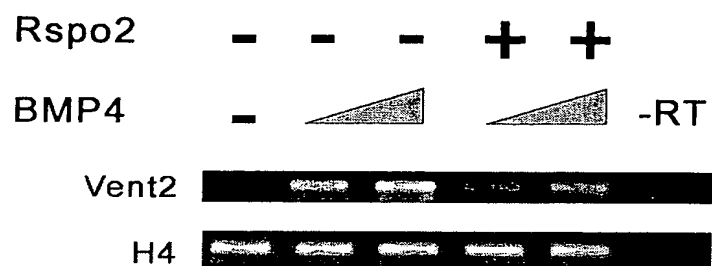
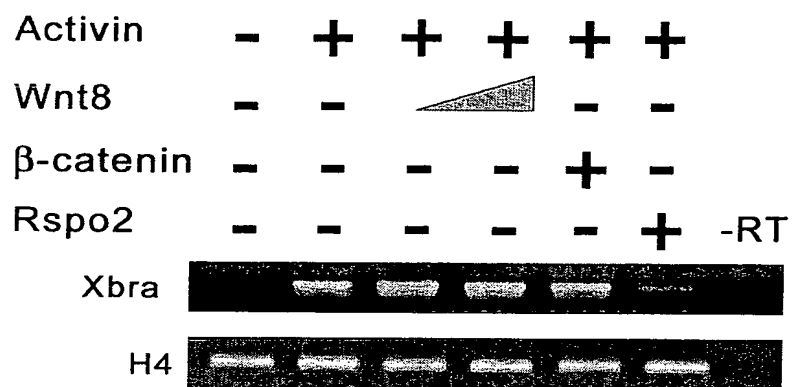
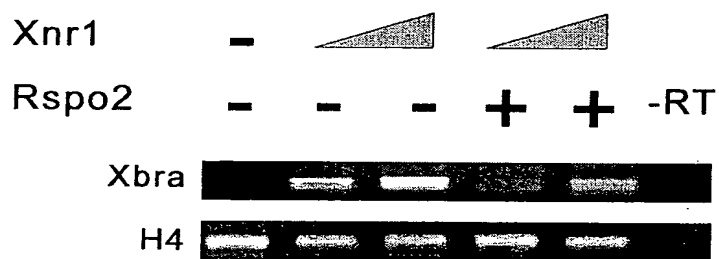
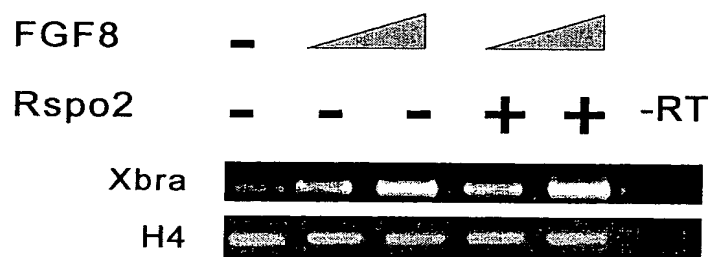
A**B****C****D**

Figure 12

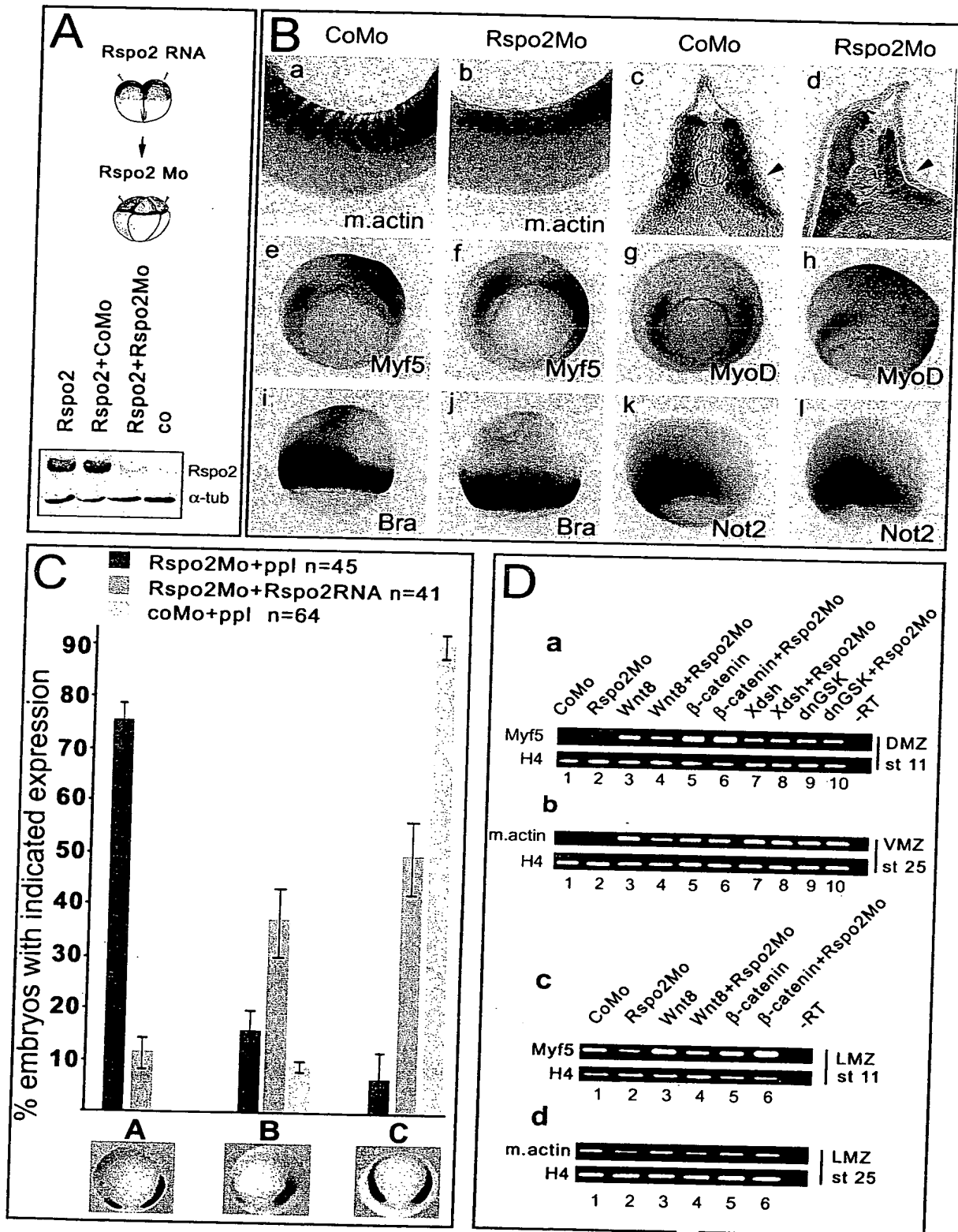


Figure 13

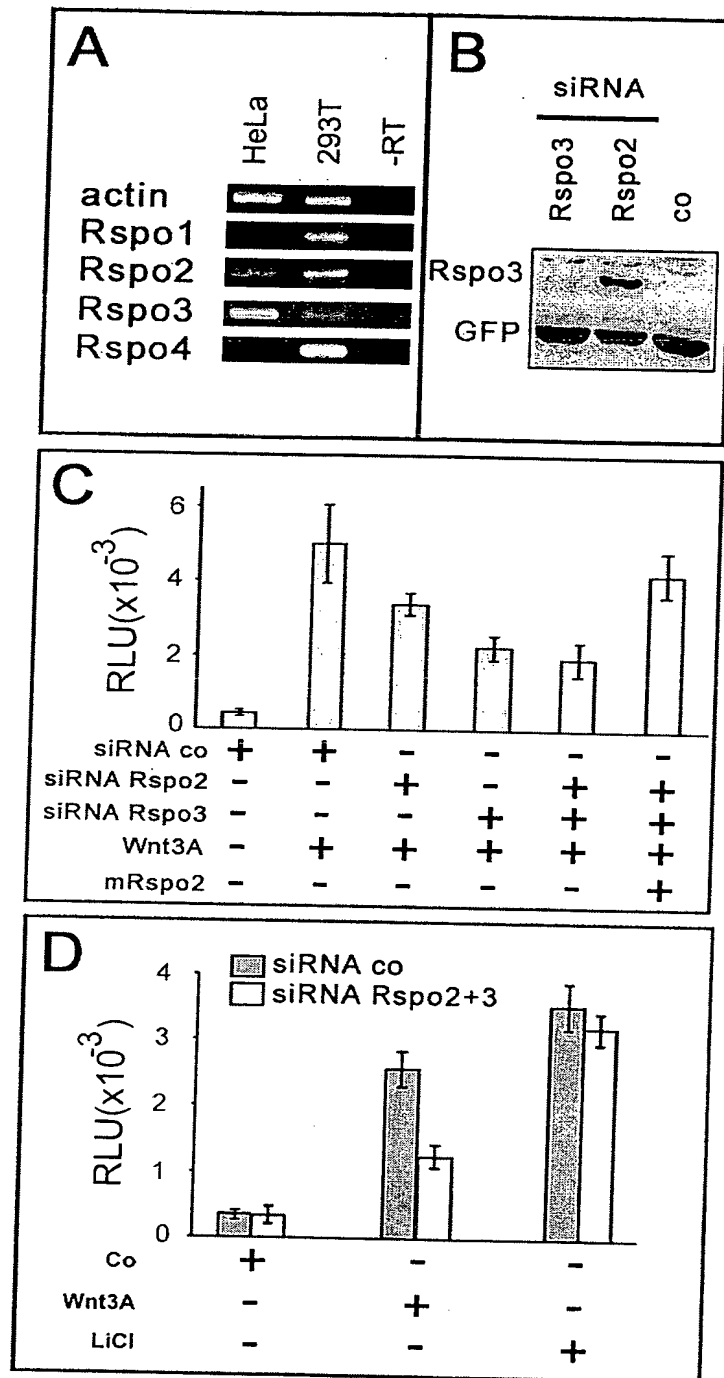
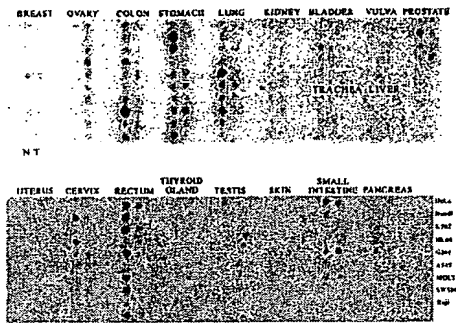
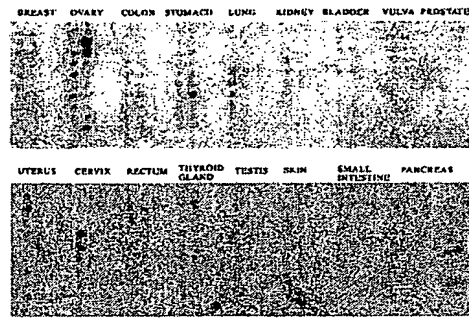


Figure 14

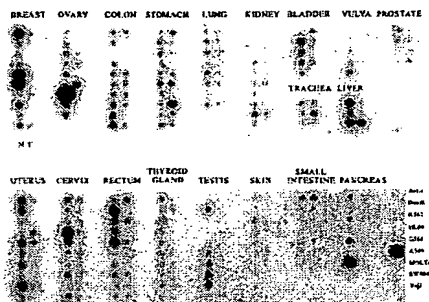
hFutrin1



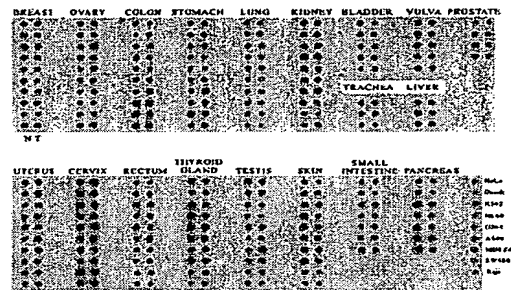
hFutrin3



hFutrin2



Ubiquitin



hFutrin4



Figure 15

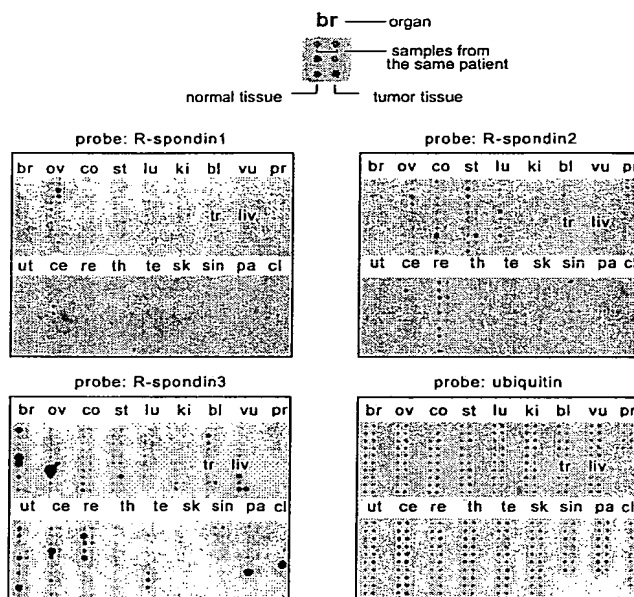
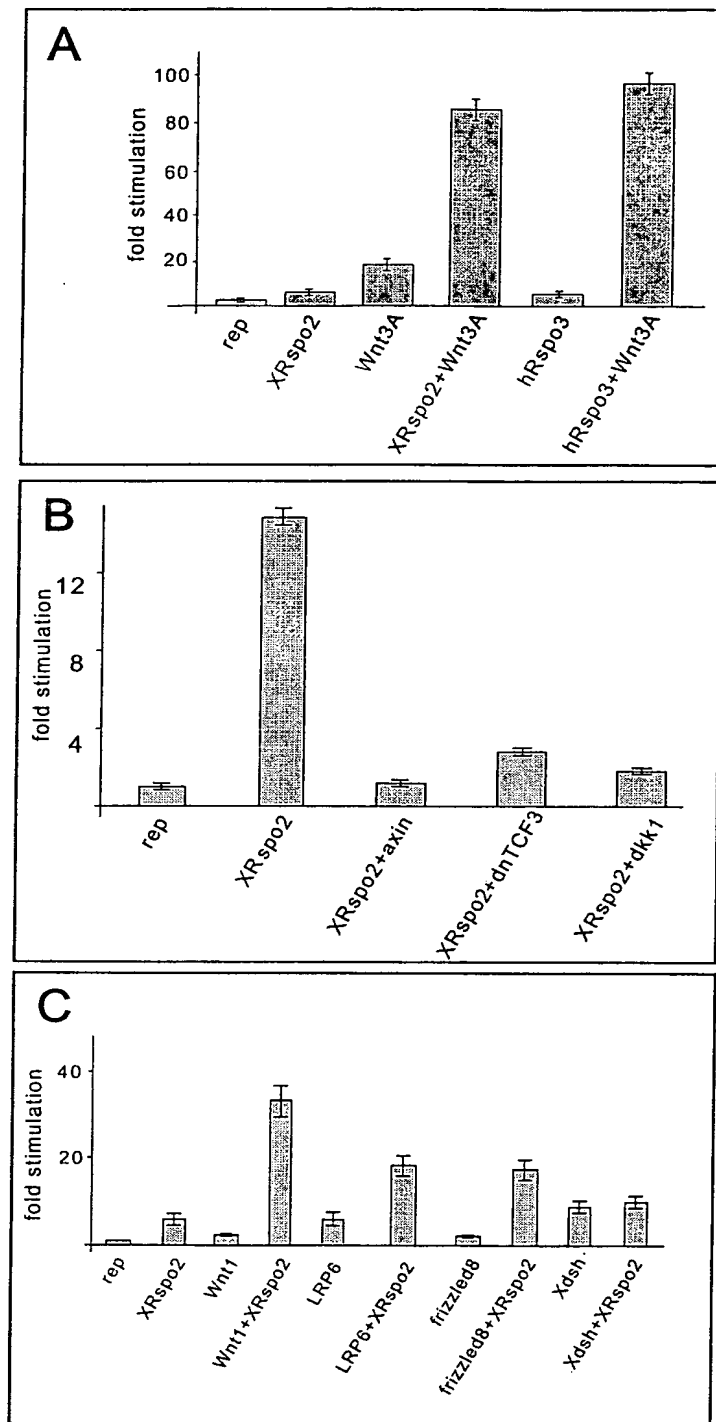


Figure 16



Figure

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